REMARKS

Prior to examination, entry of the foregoing is respectfully requested.

Claims 3, 7-10, 12, 13, 17-26, 30-33, 36-43, 45, 46 and 49-51 have been amended simply to delete multiple dependencies in the claims and correct claim dependencies. Minor amendments relating to matters of form only have also been made.

Claim 44 has been deleted and rewritten as new claim 74.

New claims 52-73 and 75-80 have been added, directed to preferred embodiments of the invention in view of the deletion of multiple dependent claims. Support for these claims may be found at the very least at pages 9-11 of the specification and in original claims 1-51.

In the event that there are any questions relating to this Preliminary Amendment, or to the application in general, it would be appreciated if the Examiner would telephone the undersigned attorney at (508) 339-3684 concerning such questions so that prosecution of this application may be expedited.

Early and favorable action in the form of a Notice of Allowance is respectfully requested and believed to be in order.

Respectfully submitted,

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Marked-up Claims 3, 7-10, 12, 13, 17-26, 30-33, 36-43, and 49-51

3. (Amended) The microorganism according to claim 1 [or 2], which is filamentous fungus.

7. (Amended) The microorganism according to [any one of claims 1 to 6] claim 1, which has a property of forming lipid vesicles containing a lipid around the colonies when said microorganism is grown on a solid medium, and/or of making the culture liquid cloudy when said microorganism is cultured in a transparent liquid medium.

8. (Amended) The microorganism according to [any one of claims 1 to 7] claim 1, which is selected by artificially treating a microorganism having an ability to accumulate an unsaturated fatty acid-containing lipid in the cell.

9. (Amended) The microorganism according to [any one of claims 1 to 7] claim 1, which is selected by artificially treating a microorganism having an ability of accumulating an unsaturated fatty acid-containing lipid in the cell, by culturing the obtained strains on a solid medium to select strains of which colonies are covered with lipid-containing lipid vesicles at the periphery, and then by selecting those strains that make the culture liquid cloudy when said microorganism is cultured in a transparent liquid medium.

10. (Amended) The microorganism according to [any one of claims 1 to 9] claim 1, which can be turned into a spheroplast or a protoplast.

12. (Amended) The microorganism according to [any one of claims 1 to 11] claim 1, wherein said extracellularly secreted lipid is a lipid in which 50% or more is triglyceride.

13. (Amended) The microorganism according to [any one of claims 1 to 12] claim 1, wherein said unsaturated fatty acids are arachidonic acid.

17. (Amended) The lipid vesicles according to [claim 15 or 16] claim 15, wherein said lipid vesicles are produced by a microorganism.

18. (Amended) Lipid vesicles encapsulating a lipid obtained from a culture liquid prepared by culturing the microorganism according to [any one of claims 1 to 14] claim 1 in a liquid medium.

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19. (Amended) The lipid vesicles according to [any one of claims 15 to 18] claim 15, which can be uniformly dispersed in water or a hydrophilic substance.

20. (Amended) The lipid vesicles according to [any one of claims 15 to 18] claim 15, which stably retains the lipid encapsulated within said lipid vesicles against oxidation.

21. (Amended) The lipid vesicles according to [any one of claims 15 to 18] claim 15, which can be separated by centrifugation.

22. (Amended) The lipid vesicles according to [any one of claims 15 to 21] claim 15, wherein the membrane of said lipid vesicles comprises sugar, protein, and lipid.

23. (Amended) The lipid vesicles according to [any one of claims 15 to 22] claim 15, which has an average diameter of 0.2 to 10 μm.

24. (Amended) The lipid vesicles according to [any one of claims 15 to 23] claim 15, wherein the lipid encapsulated in said lipid vesicles is a lipid in which 50% or more is triglyceride.

25. (Amended) A lipid isolated from the lipid vesicles according to [any one of claims 15 to 24] claim 15.

26. (Amended) A food, a cosmetic, or an animal feed comprising the lipid vesicles according to [any one of claims 15 to 24] claim 15 added thereto.

30. (Amended) A method of producing lipid vesicles which method comprises culturing the microorganism according to [any one of claims 1 to 14] claim 1 in a liquid medium and then collecting the lipid vesicles encapsulating a lipid from the culture liquid.

31. (Amended) A method of producing lipid vesicles which method comprises continuously culturing the microorganism according to [any one of claims 1 to 14] claim 1 in a liquid medium and then continuously collecting the lipid vesicles encapsulating a lipid from the culture liquid.

32. (Amended) A method of producing a lipid which method comprises culturing the microorganism according to [any one of claims 1 to 14] claim 1 in a liquid

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medium, collecting lipid vesicles encapsulating a lipid from the culture liquid, and separating a lipid containing fatty acids from said lipid vesicles.

33. (Amended) A method of producing unsaturated fatty acids which method comprises culturing the microorganism according to [any one of claims 1 to 14] claim 1 in a liquid medium, collecting lipid vesicles encapsulating a lipid from the culture liquid, separating the lipid containing fatty acids from said lipid vesicles, and isolating the unsaturated fatty acids from said lipid.

36. (Amended) The microorganism according to claim 34, [or 35] which is a filamentous fungus.

37. (Amended) The microorganism according to [any one of claims 34 to 36] claim 34, which has a property of forming lipid-containing lipid vesicles around the colonies thereof when said microorganism is grown on a solid medium, and/or of making the culture liquid cloudy when said microorganism is cultured in a transparent liquid medium.

38. (Amended) The microorganism according to [any one of claims 34 to 37] claim 34 obtained by artificially treating a microorganism which has an ability of intracellularly accumulating a lipid containing fatty acids that have 18 carbons and three or more double bonds or 20 or more carbons and two or more double bonds.

39. (Amended) The microorganism according to claims 35 [or 36] obtained by artificially treating a microorganism which has an ability of intracellularly accumulating a lipid containing fatty acids that have 18 carbons and three or more double bonds or 20 or more carbons and two or more double bonds, and by selecting, from the strains obtained, strains that make the culture liquid cloudy and then separates a lipid layer when cultured in a transparent liquid medium.

40. (Amended) The microorganism according to [any one of claims 34 to 39] claim 34, which can be turned into a spheroplast or a protoplast.

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41. (Amended) The microorganism according to [any one of claims 34 to 40] claim 34, wherein said extracellularly secreted lipid is a lipid in which 50% or more is triglyceride.

42. (Amended) A method of producing a lipid containing unsaturated fatty acids which method comprises culturing the microorganism according to [any one of claims 34 to 41] claim 34 in a liquid medium and collecting the lipid from the culture liquid.

43. (Amended) A method of producing a lipid containing unsaturated fatty acids which method comprises continuously culturing the microorganism according to [any one of claims 34 to 41] claim 34 in a liquid medium and then continuously collecting the lipid from the culture liquid.

45. (Amended) The screening method according to claim [44] 74 wherein said unsaturated fatty acids have 18 carbons and three or more double bonds or 20 or more carbons and two or more double bonds.

46. (Amended) The screening method according to claim [44] 74 wherein said microorganism is a filamentous fungus.

47. (Amended) A screening method wherein strains having a property of extracellularly secreting an unsaturated fatty acid-containing lipid are selected by artificially treating a microorganism having an ability to accumulate the unsaturated fatty acid-containing lipid in the cell, and [by] culturing the strains obtained on a solid medium to [select] determine strains of which colonies are covered with lipid-containing lipid vesicles at the periphery.

48. (Amended) A screening method wherein strains having a property of extracellularly secreting an unsaturated fatty acid-containing lipid are selected by artificially treating a microorganism having an ability to accumulate the unsaturated fatty acid-containing lipid in the cell, [by] culturing the strains obtained on a solid medium to select strains of which colonies are covered with lipid-containing lipid vesicles at the periphery,

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and [by] further culturing the selected strains in a transparent liquid medium to [select] determine strains for which the culture liquid becomes cloudy.

49. (Amended) The screening method according to claim 47, [or 48] wherein said artificial manipulation is mutation treatment with N-methyl-N'-nitro-N-nitrosoguanidine (NTG).

50. (Amended) The screening method according to claim 47, [or 48] wherein said artificial manipulation is mutation treatment, gene manipulation, or cell fusion.

51. (Amended) A microorganism selected by the screening method according to [any one of claims 44 to 50] claim 74.